Temporary Housing Staging Areas

- My Background and Disaster Experience
- Staging Area Startup
- Types of Trailers
- Inspection and Systems Test At Staging.
- Safeguarding Water Heaters

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- FEMA 1635 MO Caruthersville Tornado
- FEMA 1601 TX Hurricane Rita
- Belleville Pool Loss 2005
- WV Emergency Flood Recovery

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Staging Area Startup

- Develop a working relationship with FEMA personnel
- Location selection, site plan, security, and construction
- Implement situation-appropriate inspection and testing for housing units.
- Coordinate with install teams to insure inspections and testing are providing usable housing units in a timely manner.
- Make improvements!

Relationship with FEMA

- Every region is different
- Every state is different

Types of Trailers

- Mobile Homes
- Park Models
- Travel Trailers

Accessible Units

- Special Needs
- Make certain housing unit is appropriate for needs of applicant. (FEMA normally defines applicant needs)

Why Inspect Housing Units at Staging?

- Reduce time and effort involved in installation,
- Reduce number of maintenance calls after lease in
- Reduce number of unit replacements after installation.

Why Inspect Housing Units at Staging?

- During FEMA-DR-1635-MO
  - Approximately 5 units out of 10 mobile homes,
  - 1 unit out of 10 travel trailers
  - 4 units out of 10 park models
  - If installed without testing in staging area would have required in-field maintenance.

Handouts

- Staging Area Testing Flow Chart
- Explanation of Testing
- Inspection and Tracking Reports

Inspector Qualifications

- Technical experience
- Reasonable understanding of housing units
- Sense of urgency
- Can distinguish safety and non-safety issues

Explanation of Testing

- In the staging area the USACE inspector conducts a detailed visual inspection and a systems test of each temporary housing unit.

EverStart

ALL-STAR
PULSE 1850

EAGLE
EAGLE

Visual Inspection

- Visual inspection includes looking inside and outside of each temporary housing unit and logging condition of unit and its components. This inspection along with the systems test is to ensure unit is disaster ready
- Disaster ready means decent, safe, sanitary and road worthy

Systems Tests

- Fresh Water
- Electric
- LP Gas

Air Test for Fresh Water System

- **Part 1**
- Apply air to water system
- Open and close all fixtures (flow test)
- listen for air leaks

- **Part 2**
- Apply air pressure below manufacturer’s recommended limit
- Check pressure

THE WATER HEATER

- In mobiles homes water heaters are tested in the field after water is connected and water heater is filled.

THE WATER HEATER

- Know your units!
- Most all Travel Trailer water systems can be winterized
- Some Park Models water systems can be winterized

THE WATER HEATER

Electrical System

- For electrical test units are plugged into appropriate power supplies and all electrical components are checked for safety and functionality including smoke, carbon monoxide and propane detectors.

- EXCLUDING WATER HEATERS

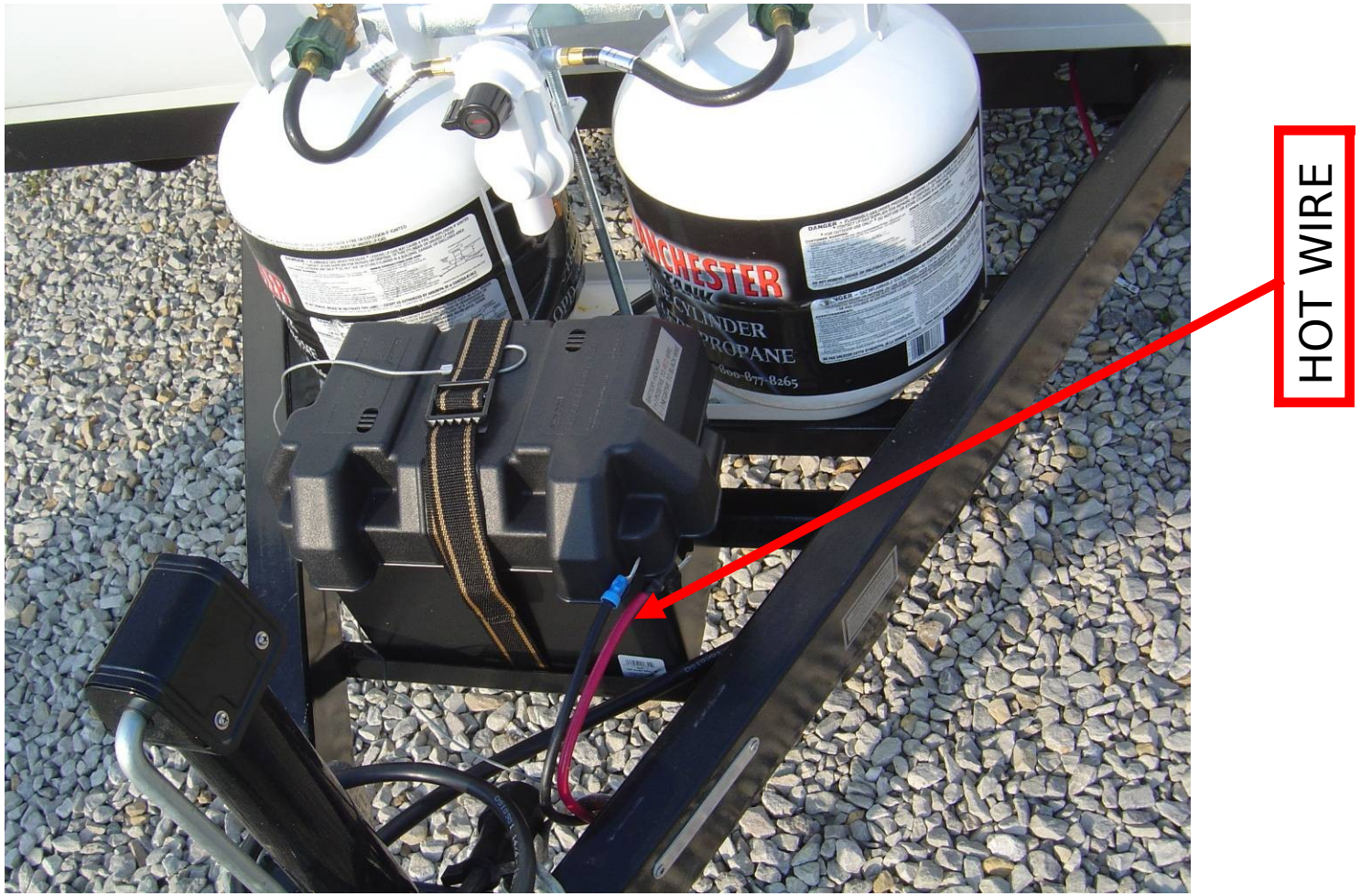
Electrical System

- Travel Trailers
  - 110V 30A
  - 220V 50A (Accessible)
  - Plug in
- Park Models
  - 220V 100A to 200A
  - Direct Wire
- Mobile Homes
  - 220V 200A
  - Direct Wire

Electrical System

- Travel trailers have Alternating Current (AC) and Direct Current (DC) components.
- TURN OFF breaker to HOT WATER HEATER before energizing unit

Electrical System



LP Gas System on Typical Travel Trailers

- The LP gas system is air tested by FEMA before transport to Staging (during FEMA 1635 MO and 1601TX)
- After install LP gas is connected and range, furnace and refrigerator are activated.

- NOTE: Always verify water heater is filled with water before activation. Other wise damage to water heater will occur.

LP Gas Range

LP Gas

Gas and Electric Refrigerator in some units

Situational Awareness with LP Gas

Repairs Made at Staging

- FEMA
- Manufacturers
- USACE (emergency only)

Questions???